IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-235 (*Canceled*).

Claim 236. (*New*) A device for opening a shell to release or admit a substance, the device comprising:

a shell;

a shape memory material activator; and

means for deforming the activator in situ by only a single irreversible action while the activator is within a predetermined temperature range, whereby the device is transformed from a dormant state to an active state wherein the activator responds to temperature changes to create a path through the shell to release or admit the substance.

Claim 237. (*New*) A temperature activated device, comprising:

a shape memory material activator; and

means for deforming the activator in situ by only a single irreversible action while the activator is within a predetermined temperature range. whereby the device is transformed from a dormant state to an active state wherein the activator responds to temperature changes.

Claim 238. (*New*) A method for opening a shell to release or admit a substance, the method comprising the steps of:

providing a shell;

providing a shape memory material activator; and

deforming the activator in situ by only a single irreversible action while the activator is within a predetermined temperature range, whereby the device is transformed from a dormant state to an active state wherein the activator responds to temperature changes to create a path through the shell to release or admit the substance.

Claim 239. (*New*) A method for arming a temperature activated device, the method comprising the steps of:

providing a shape memory material activator; and

deforming the activator in situ by only a single irreversible action while the activator is within a predetermined temperature range, whereby the device is transformed from a dormant state to an active state wherein the activator responds to temperature changes.

Claim 240. (*New*) A self-propelled device, comprising:

a body;

a shape memory material activator operatively associated with the body; and

means for providing one-way traction to the device whereby the device self-propels by first moving one end of the body forward as the other end provides traction when the shape memory activator undergoes a temperature change in one direction and then by moving the other end of the body as the one end provides traction with changing temperature in the reverse direction.

Claim 241. (*New*) A self-propelled device, comprising:

a shape memory material activator configured to alternate between two shapes when subjected to temperature cycling; and

a plurality of work enablers forming part of the shape memory material activator along its length for enabling the device to self propel.

Claim 242. (*New*) A self-propelled delivery system, comprising:

a shape memory material activator;

work enablers operatively associated with the activator; and

at least one track configured with traction means, wherein the traction means engages the work enablers to self-propel the activator therealong when the activator is subjected to temperature cycling.

Claim 243. (*New*) A self-propelled substance delivery system, comprising:

a shell containing at least a substance;

a shape memory material activator;

work enablers operatively associated with the activator; and

at least one track configured with traction means, wherein the work enablers engage the traction means to self-propel the activator therealong when the activator is subjected to temperature cycling and thereby deliver at least the substance.

Claim 244. (*New*) A self-driven track system comprising:

at least one track configured with elements for providing traction; and

a shape memory material activator anchored at a point along its length and configured with work enablers adapted to engage the traction elements of the track, wherein the shape memory material activator drives the track when subjected to temperature cycling and wherein the distance traveled by the track with each half of a temperature cycle is determined by the position of the anchor point relative to the length of the activator.

Claim 245. (*New*) An energy conversion system, comprising:

at least one module for converting thermal energy into mechanical energy, the at least one module includes a shape memory material activator;

means for providing traction operatively associated with the at least one module;

at least one energy transmission member; and

means for providing traction operatively associated with the at least one energy transmission member, wherein the at least one module traction means engages the transmission member traction means during temperature cycling of the activator thereby coupling the module to the energy transmission member for useable mechanical energy.

Claim 246. (*New*) A shape memory material activated device, the device comprising:

at least one shell containing at least a substance; and

a shape memory material activator variably deformed, wherein different parts of the activator respond to different temperatures, within a predetermined temperature range, to create a path through the at least one shell.

Claim 247. (*New*) An extended temperature responding shape memory material device, comprising:

a variably deformed shape memory material element, wherein the shape memory material element undergoes shape recovery within a predetermined extended temperature range beginning from the least deformed locations and proceeding to the most deformed locations with increasing temperature.

Claim 248. (*New*) A shape memory material activated device for controlling the passing rate of a substance through a shell, the device comprising:

a shell;

a barrier of variable permeability; and

a shape memory material activator configured to create a path through the shell during temperature changes such that progressive exposure of the variable barrier occurs thereby permitting the substance to pass therethrough at a changing rate.

Claim 249. (*New*) A shape memory material activated device for allowing the passing of a substance through a shell, the device comprising:

a shell having a volume for containing a substance; and

a pressure generator operatively associated with the shell, the pressure generator comprising a shape memory material activator and configured to subject the shell to a pressure cycle while undergoing a volume change during temperature cycling of the shape memory material activator thereby allowing the passing of the substance through the shell.

Claim 250. (*New*) The device according to claim 249, wherein the shell has a fixed volume, whereby with each half pressure cycle opens to allow the passing of a substance in a direction determined by the direction of pressure change.

Claim 251. (*New*) The device according to claim 249, wherein the shell has a variable volume, whereby with one half pressure cycle opens to allow the passing of a substance in a direction determined by the direction of pressure change and changes volume during the other half of the pressure cycle.

Claim 252. (New) A shape memory material activated device for stimulating the senses, the device comprising:

a shell containing a substance; and

a shape memory material activator configured to create a path through the shell when subjected to temperature changes within a predetermined temperature range, whereby the delivery of the substance effectively stimulates at least one of the senses.

Claim 253. (*New*) A system of shape memory material activated substance delivery devices, the system comprising:

a plurality of shape memory material activated substance delivery devices, each device comprising at least one shell containing at least a substance and a shape memory material activator configured to release at least the substance at a predetermined temperature, wherein the delivery of each substance, over a temperature range encompassing the release temperatures of the plurality of devices, collectively produces a combined effect.